

## **REMARKS**

Claims 1-23 are pending in the application. The Examiner has objected to the drawings under 37 C.F.R §1.83(a) as not showing every feature of the invention specified in the claims. The Examiner has objected to Claims 1-6, 8 and 17-23 because of informalities. The Examiner has rejected Claims 1-8, 11 and 20-22 under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner has rejected Claims 17-19 and 23 under 35 U.S.C. §102(e) as being anticipated by Samsung Electronics Co. TSGR1#6(99)915 (“Multiple-Scrambling Code, TRG-RAN Working Group 1, Meeting #5”). The Examiner has rejected Claim 7 under 35 U.S.C. §103(a) as being unpatentable over Chen et al. (U.S. Patent 5,923,650) in view of Terashima (U.S. Patent 6,385,232 B1) and Terasawa et al. (U.S. Patent 6,385,264 B1). The Examiner has rejected Claims 9-12 under 35 U.S.C. §103(a) as being unpatentable over Popovic (U.S. Patent 6,567,482 B1). The Examiner has rejected Claims 13-16 under 35 U.S.C. §103(a) as being unpatentable over Terasawa et al. in view of Nystrom et al. (U.S. Patent 6,526,091 B1). The Examiner has rejected Claim 20 under 35 U.S.C. §103(a) as being unpatentable over Samsung Electronics Co. TSGR1#6(99)915 in view of Nystrom et al.

Please cancel Claims 1-6 and 17-23, without prejudice.

Regarding the objection to the drawings, the Examiner states that certain elements recited in Claim 17 must be shown in the drawings or cancelled from the claim. Please note that Claim 17 has been cancelled. Withdrawal of the objection to the drawing is respectfully requested.

Regarding the objection to Claim 8, the Examiner suggested that in Claim 8 “a mask” be changed to “the mask”. Claim 8 has been amended to read “the mask”. Withdrawal of the objections of Claim 8 is respectfully requested.

The rejections of Claims 7, 8 and 11 under §112, second paragraph, for being indefinite, are addressed as follows. In Claim 7, the Examiner states that the word “it” in “when it is required” is not clear; Claim 7 has been amended to read “when an assignment of a new channel is required”. In Claim 8, the Examiner states that “scrambling codes” lacks antecedent basis; Claim 8 has been amended to read “outputting the generated scrambling code[[s]] as a real-component scrambling code[[s]]; and delaying the generated scrambling code[[s]] to output an imaginary-component scrambling code[[s]].” In Claim 11, the Examiner states that “a common control channel” relates to “a common channel” recited in Claim 9, and requests clarification;

Claim 11 has been amended to recite “the common control channel”. Based on the foregoing amendments, withdrawal of the rejection of Claims 7, 8 and 11 is respectfully requested.

The Examiner has rejected Claim 7 under §103(a) as being unpatentable over Chen et al. in view of Terashima and Terasawa et al. Chen et al. discloses a method and apparatus for reverse link rate scheduling; Terashima discloses a synchronization device and its method; and, Terasawa et al. discloses a method and apparatus for mitigating interference between base stations in a wideband CDMA system. Claim 7 recites receiving “a message including a 4 bit ID of a secondary scrambling code” and “using the received ID of the secondary scrambling code” to generate the mask. None of the cited references discloses either “a message including a 4 bits ID of a secondary scrambling code” or “using the received ID of the secondary scrambling code” to generate the mask as recited in Claim 7. Additionally, Claim 7 recites to a secondary scrambling code setting scheme being able to optimize downlink signaling overhead by using a relationship between a primary scrambling code and secondary scrambling codes. Chen et al. fails to disclose the features of having a relationship between a primary scrambling code and secondary scrambling codes and secondary scrambling code setting. In addition, the secondary code channel disclosed Chen et al., is an orthogonal code which is additionally assigned to support a high data rate, while “secondary code channel” disclosed in the present application is an ID which identifies “secondary scrambling code” and therefore is different from the one disclosed in Chen et al. Also, Terashima relates to cell search and discloses features belonging to a category different from those disclosed in the present application. Further, as shown in Fig. 5, a “short code” in Terashima, is used by multiplying it with a long code. That is, the short code and long code are similar to a scrambling code and an orthogonal code in the present application. Accordingly, the short code in Terashima is different from the secondary scrambling code in the claims of the present application. Finally, Terashima relates to cell search and discloses features belonging to a category different from the present invention. The ID disclosed in Terasawa et al., relates to 16 orthogonal sequences used in a secondary sync channel, which is different from an ID identifying a “secondary scrambling code” as disclosed in the claims of the present application. Withdrawal of the rejection of Claim 7 is respectfully requested.

The Examiner has rejected Claims 9-12 under §103(a) as being unpatentable over Popovic, Claim 9 being in independent form. Popovic discloses a method and apparatus for

efficient synchronization in spread spectrum communications. Claim 9 recites transmitting to a mobile station “an ID of a secondary scrambling code for expanding a capacity of channels to be used by the mobile station...which can be used with the primary scrambling code”. Popovic does not disclose “an ID of a secondary scrambling code” being received by a mobile station as recited in Claim 9. Additionally, Popovic relates to cell search and discloses features belonging to a category different from the present invention. Popovic merely discloses a “cell search” and “random access procedure”, and fails to disclose any relationship between a primary scrambling code and secondary scrambling codes and secondary scrambling code setting. In particular, column 3, lines 47-49 of Popovic, describes a concept of transmitting a sync channel through a known sequence. On the contrary, a sync channel as disclosed in the claims of the present application is a channel having different characteristics from a common control channel of the present invention. Based on at least the foregoing, withdrawal of the rejection of Claim 9 is respectfully requested.

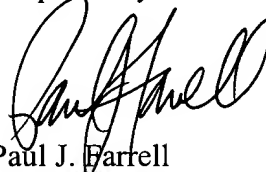
The Examiner has rejected Claims 13-16 under §103(a) as being unpatentable over Terasawa et al. in view of Nystrom et al., Claim 13 being in independent form. Terasawa et al. discloses a method and apparatus for mitigating interference between base stations in a wideband CDMA system, and Nystrom et al. discloses communications methods and apparatus based on orthogonal Hadamard-based sequences having selected correlation properties. Claim 13 recites “receiving an ID of a secondary scrambling code from the base station” and “generating the secondary scrambling code by combining the ID of the primary scrambling code and the ID of the secondary scrambling code”. Neither Terasawa et al. nor Nystrom et al. discloses either “receiving an ID of a secondary scrambling code from the base station” and “generating the secondary scrambling code by combining the ID of the primary scrambling code and the ID of the secondary scrambling code” as recited in Claim 13. Additionally, Terasawa et al. and Nystrom relate to cell search and disclose features belonging to a category different from the present invention. The ID in Terasawa et al. and Nystrom et al., relate to 16 orthogonal sequences used in a secondary sync channel, and is different from the ID which identifies “secondary scrambling code” recited in the claims of the present application. Withdrawal of the rejection of Claim 13 is respectfully requested.

Independent Claims 1, 3 and 14 are believed to be in condition for allowance. Without conceding the patentability per se of dependent Claims 4-12 and 15-17, these are likewise believed to be allowable by virtue of their dependence on their respective amended independent claims. Accordingly, reconsideration and withdrawal of the rejections of dependent Claims 4-12 and 15-17 is respectfully requested.

Finally, new Claims 24-35 have been added with Claim 24 and 30 in independent form. No new matter has been added. Claims 24-35 are believed to be in condition for allowance.

Accordingly, all of the claims pending in the Application, namely, Claims 7-16 and 24-35, are believed to be in condition for allowance. Should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters, the Examiner may contact Applicant's attorney at the number given below.

Respectfully submitted,



Paul J. Farrell  
Reg. No. 33,494  
Attorney for Applicant

DILWORTH & BARRESE  
333 Earle Ovington Blvd.  
Uniondale, New York 11553  
Tel: (516) 228-8484  
Fax: (516) 228-8516

PJF/MJM/dr